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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,179	08/21/2006	Guillermo C. Bazan	1279-454	3968

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EXAMINER	
WALTERS JR, ROBERT S	
ART UNIT	**PAPER NUMBER**
1711	

MAIL DATE	DELIVERY MODE
03/15/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/595,179	BAZAN ET AL.	
	Examiner	Art Unit	
	ROBERT S. WALTERS JR	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *10 and 13-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11 and 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Application

Claims 1-20 are pending. Claims 10 and 13-20 are withdrawn. Claims 1-9, 11 and 12 are presented for examination.

Response to Amendment

The declaration filed on 1/4/2011 under 37 CFR 1.131 has been considered but is ineffective to overcome the Huang et al. reference.

The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Huang reference.

The declaration only provides that exhibit # 2 is attached and is a copy of an invention disclosure submitted on December 8, 2003. However, the declaration does not explain what this exhibit is relied upon to show, namely it is not explained how this invention disclosure establishes the applicant's reduction to practice of the invention prior to the effective date of the Huang reference. It should be noted that each exhibit relied upon as evidence should be specifically referred to in the declaration, in terms of what it is relied upon to show. Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also In re Harry, 333 F.2d 920, 142 USPQ 164 (CCPA 1964).

Response to Arguments

Applicant's arguments filed 1/4/2011 have been fully considered but they are not persuasive. The applicant argues that they have provided evidence that establish their invention prior to the effective date of the Huang et al. reference, thereby rendering the rejections of the claims over this reference improper. However, as noted above, the declaration is ineffective to overcome the Huang et al. reference. Therefore, the examiner maintains the previous rejections.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1, 2, 4 and 6-8 are rejected under 35 U.S.C. 102(a) as being anticipated by Huang et al. ("Novel Electroluminescent Conjugated Polyelectrolytes Based on Polyfluorene" Chem. Mater. 2004, 16, 708-716).

Regarding claims 1, 2, 4 and 6-8, Huang teaches a method of forming adjacent layers of conjugated polymers on a substrate (pg 709, 2nd column, LED Fabrication and Characterization Section, the double-layer device) comprising:

(a) providing a first solution comprising a water-soluble cationic conjugated polymer (the polyelectrolytes, see P4, page 711) and a polar solvent, such as methanol (pg 709, 2nd

column, LED Fabrication and Characterization Section) or water (pg 716, 2nd column, line 8-top of the Conclusion section);

(b) providing a second solution comprising a second conjugated polymer (such as MEH-PPV) in a second solvent (see pg 709, 2nd column, LED Fabrication and Characterization Section);

(c) depositing a first layer of the MEH-PPV solution onto a substrate by spin-casting (see pg 709, 2nd column, LED Fabrication and Characterization Section);

(d) depositing a second layer of the polyelectrolyte on the first layer by spin-casting (pg 709, 2nd column, LED Fabrication and Characterization Section);

wherein the polymer deposited in the first layer does not dissolve in the solvent deposited in the second layer (note MEH-PPV is not soluble in methanol, see also pg 716, 2nd column, line 8-top of the Conclusion section).

Huang teaches all the critical limitations of claims 1, 2, 4 and 6-8, therefore Huang anticipates these claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham **v.** John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Hsu (U.S. PGPUB No. 2003/0222250).

Regarding claim 3, Huang teaches all the limitations of claim 1, but fails to teach the inclusion of a detergent. However, Hsu teaches a method of preparing light-emitting diodes (abstract) by preparing a mixture comprising an electrically conducting polymer and a surfactant (abstract), comparable to a detergent. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Huang's method by including a detergent in

the solution with the conjugated polymer. One would have been motivated to make this modification as Hsu teaches that the inclusion of the surfactant facilitates coating of the polymer, improves device performance, and facilitates the use of flexible substrates (0011).

3. Claims 5, 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Yu et al. (U.S. PGPUB No. 2004/0094768).

Regarding claims 5, 9, 11 and 12 Huang teaches all the limitations of claims 1 and 6, but fails to teach the substrate being a film or rigid. However, Yu teaches method for making PLED's (abstract and 0059) by applying polymers by drop-casting or ink jet printing (0058) to substrates that can be rigid or films (0054). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Huang's method by applying their polymer materials to substrates that can be rigid or films, as taught by Yu. One would have been motivated to make this modification as it would have been obvious to one ordinary skill in the art at the time of the invention that Huang's polymers could readily be applied to varied substrates that are rigid or films. Further, the substitution of these substrates for Huang's substrates could be made with a reasonable expectation of success (see directly above), and would provide a predictable result, namely a method of fabricating a PLED.

Conclusion

Claims 1-20 are pending.

Claims 10 and 13-20 are withdrawn.

Claims 1-9, 11 and 12 are rejected.

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT S. WALTERS JR whose telephone number is (571)270-5351. The examiner can normally be reached on Monday-Thursday, 9:00am to 7:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/
Supervisory Patent Examiner, Art Unit 1711

/ROBERT S. WALTERS JR/
March 11, 2011
Examiner, Art Unit 1711